

Amendments to the Claims

Please amend Claim 8. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1. (Previously Presented) Method of providing a public, wireless broadband mobile network by upgrading a fixed, broadband access network comprising installing home network means at subscriber premises of said fixed network, the home network means comprising at least a wireless local area network (LAN) and a broadband access line to the fixed broadband network, wherein the wireless LAN functions as an access medium for casual passing mobile terminals and for wireless terminals and devices of a fixed subscriber, wherein the method comprising:
dividing a bandwidth of the wireless LAN and the broadband access line of the fixed subscriber into respectively at least two separate channels, wherein a first channel is allocated to the fixed subscriber and a second channel allocated to the public part of the network used by the casual passing mobile terminals.
2. (Previously Presented) Method according to claim 1, characterized in dynamically dimensioning the at least two channels dependent on the fixed subscriber's instantaneous traffic in the wireless LAN and over the broadband access line, wherein a remaining bandwidth is made available for passing mobile terminals.
3. (Previously Presented) Method according to claim 2, characterized in that the remaining bandwidth/second channel may include the portion of the physical realisable bandwidth not subscribed for by the fixed subscribers, the portion of the bandwidth subscribed for, but instantaneously unused by the fixed subscriber and the bandwidth that may be released due to priority mechanisms implemented in the network.

4. (Previously Presented) Method according to claim 1, characterized in that the home network means and the public broadband network perform security and authentication functions securing the fixed subscriber and the passing mobile terminals against tapping and illegal use of said broadband network.
5. (Previously Presented) Method according to claim 1, characterized in providing protocols in the home network means and in said fixed network for performing mobility, handover and roaming procedures.
6. (Previously Presented) Digital mobile broadband network providing public mobile or nomadic broadband services based on an existing fixed, broadband access network with a number of subscribers possessing a home network means comprising at least a wireless local area network (LAN) and a broadband access line to a public, fixed broadband network, wherein the wireless LAN is operable to function as an access medium for casual passing mobile terminals as well as for local wireless terminals of the fixed subscriber, and wherein the bandwidth of each wireless LAN and broadband access line is divided into at least two separate channels, a first channel allocated to the fixed subscriber and a second channel allocated to a public part of the network available for the casual passing mobile terminals.
7. (Previously Presented) Broadband network according to claim 6, characterized in that the at least two channels are dynamically dimensioned dependent on fixed subscriber's instantaneous traffic in the wireless LAN and over the broadband access line.
8. (Currently Amended) Broadband network according to ~~claims 6 and 7~~ claim 6, characterized in that the second channel comprises a part of the physical realisable bandwidth not subscribed for by the fixed subscriber, a part of the bandwidth subscribed for, but instantaneously unused by the fixed subscriber and bandwidth released due to priority mechanisms implemented in the network.

9. (Previously Presented) Broadband network according to claim 6, characterized in that the home network means and the broadband access network are adapted to perform security and authentication functions for securing the fixed subscriber and the passing mobile terminals against tapping and illegal use of said broadband network.
10. (Previously Presented) Broadband network according to claim 6, characterized in that the home network means and said fixed broadband access network comprising protocols for mobility, handover and roaming procedures.
11. (Previously Presented) Home network device for separating traffic from a fixed subscriber of a fixed, broadband access network and traffic from casual passing mobile terminals wherein said device comprising:
 - A wireless LAN providing local, wireless broadband communication for the subscriber of the fixed, broadband network and broadband communication for casual passing mobile terminals,
 - A broadband access line connected to the fixed broadband network,
 - Appropriate traffic and control functions comprising a resource management system and multiplexer means adapted to divide a physical available bandwidth of the wireless LAN and the broadband access line into at least two channels, a first channel to be used by the fixed network's subscriber and a second public channel available for the casual passing mobile terminals.
12. (Previously Presented) Home network device according to claim 11, wherein the resource management system is adapted to perform dynamical bandwidth allocation to the casual passing mobile terminals dependent on the fixed subscriber's instantaneous traffic load on the wireless LAN and over the broadband access line.
13. (Previously Presented) Home network device according to claim 11, comprising switching/routing means adapted to pass traffic to and from the broadband access network and the different wireless terminals located within the reach of the wireless LAN.

14. (Previously Presented) Home network device according to claim 11, comprising protocol means for seamless mobility and handover procedures maintaining the connection to the fixed broadband access network for a mobile terminal passing subscriber wireless LANs.
15. (Previously Presented) Home network device according to claim 11, comprising protocol means for roaming between different fixed, network operators, P2P/Ad Hoc operators and individual subscriber LANs.
16. (Previously Presented) Home network device according to claim 11, comprising function means adapted to support the broadband network's management and charging requirements.
17. (Previously Presented) Use of a home network device according to claim 11, for providing local wireless communication for the fixed subscriber and mobile broadband services to casual passing wireless terminals.